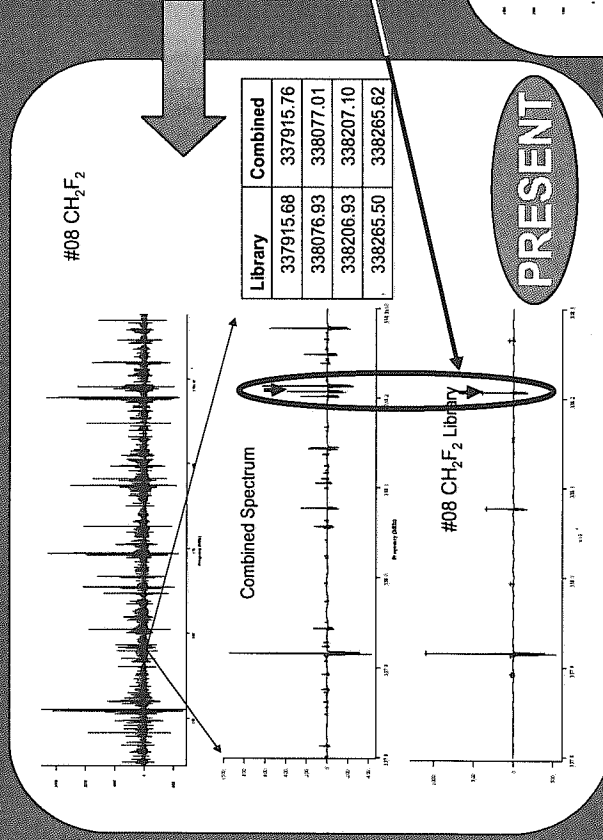


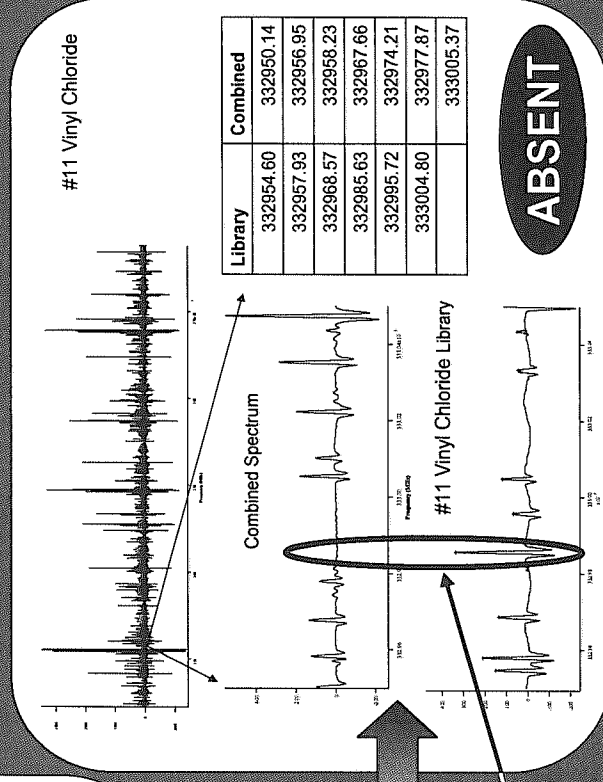
Figure 1

- Matching lines with the proper intensities:
- **SPECIES IS PRESENT**



*A perfect match--
even in clutter*

- Non-matching lines:
- **SPECIES IS NOT PRESENT**

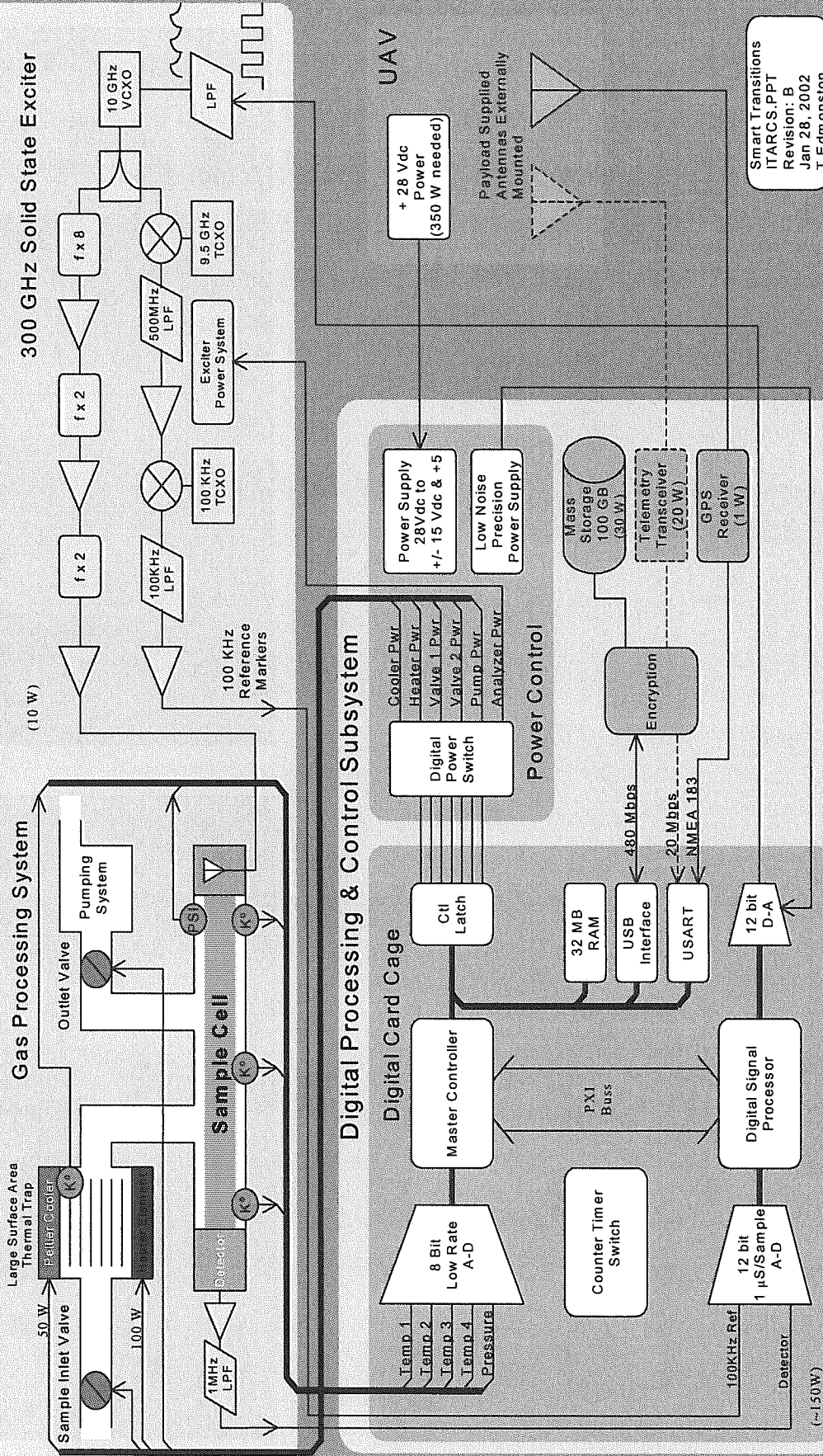


A very obvious instance

Figure 4

Integrated Tactical Airborne Remote Chemical Spectrometer (ITARCS)

THz Flight Module Subsystem



Smart Transitions
ITARCS.PPT
Revision: B
Jan 28, 2002
T. Edmonston

Figure 5

Amplifier Based 330 GHz Source

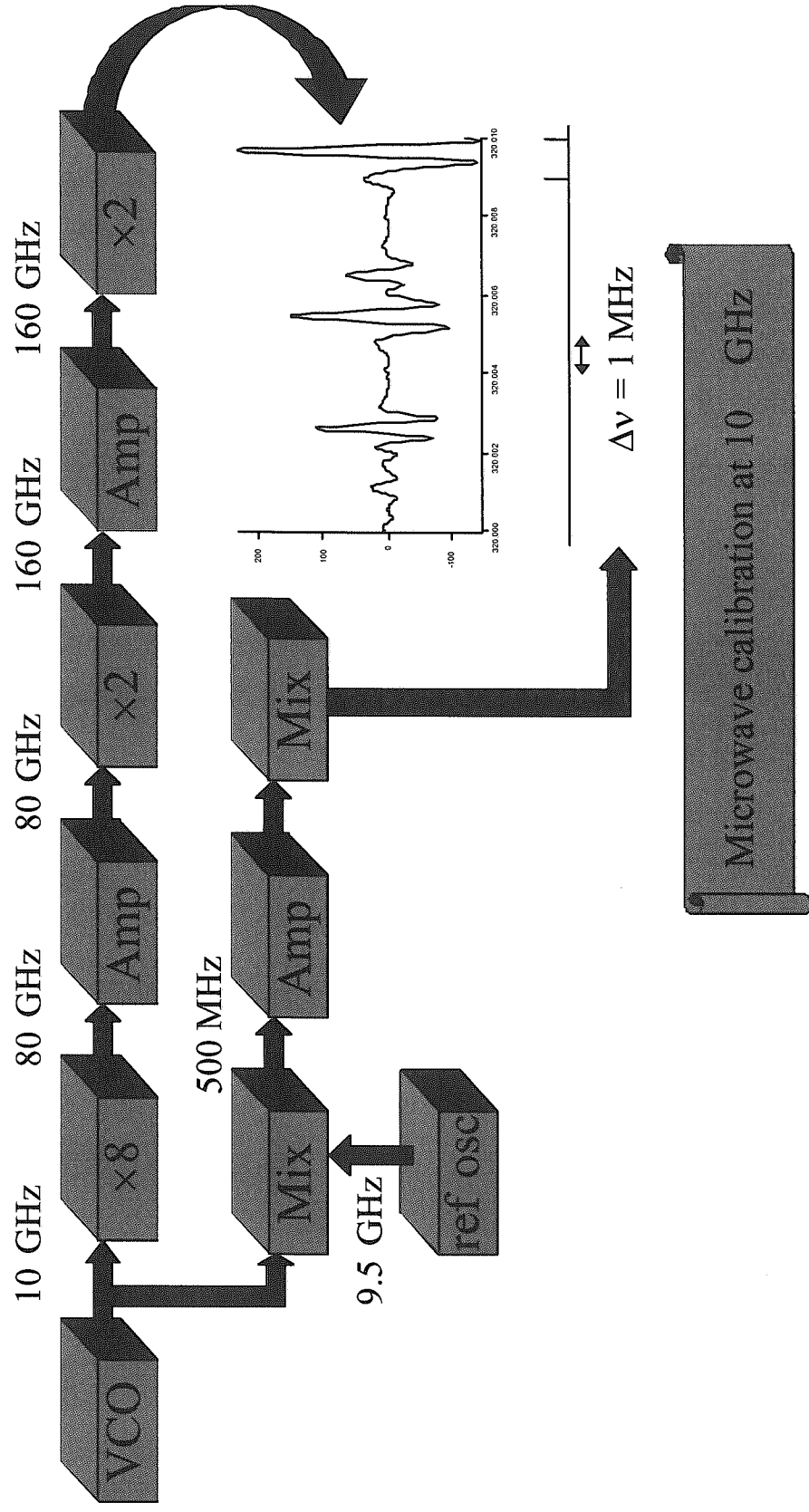


Figure 6

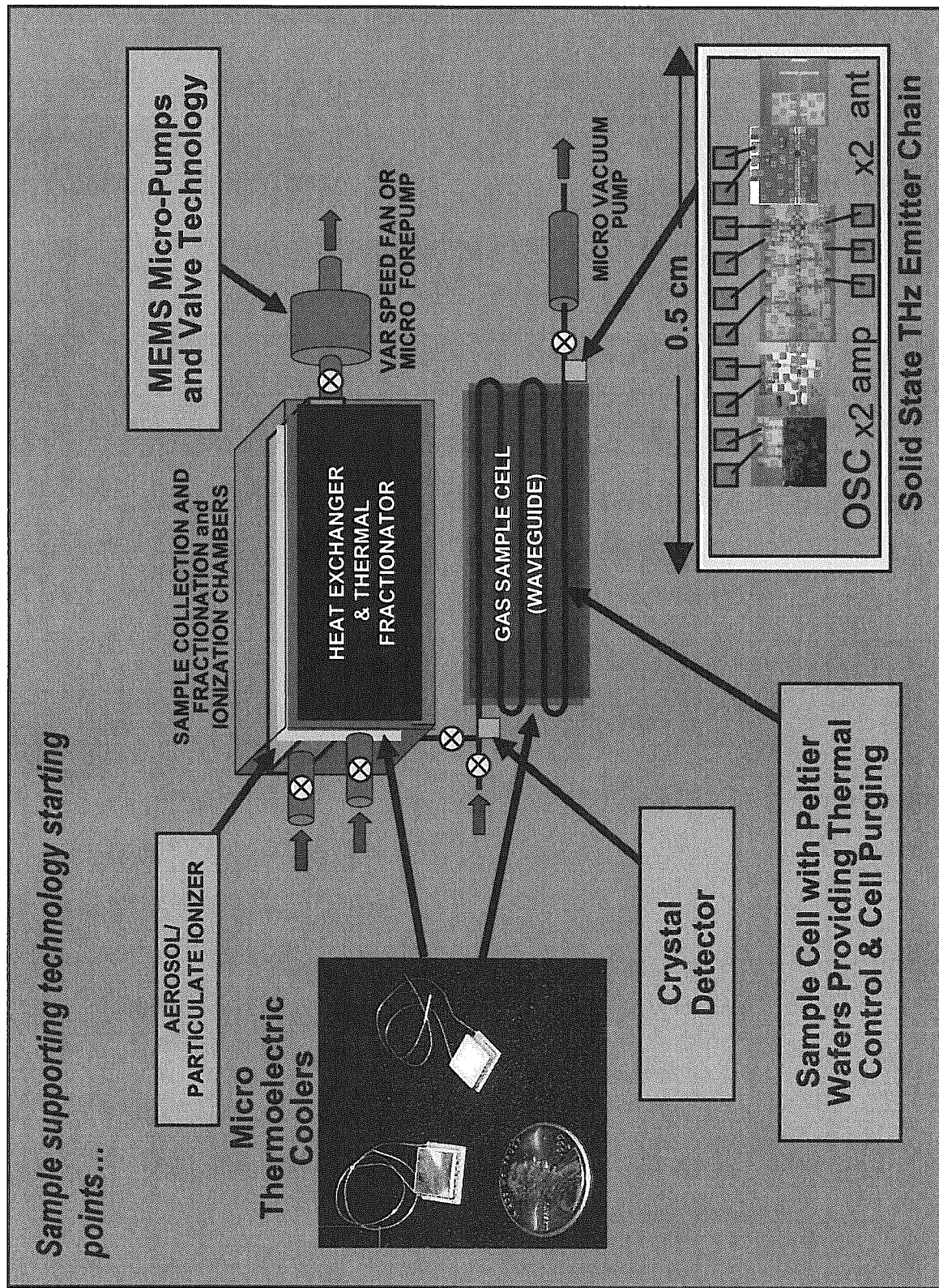


Figure 7

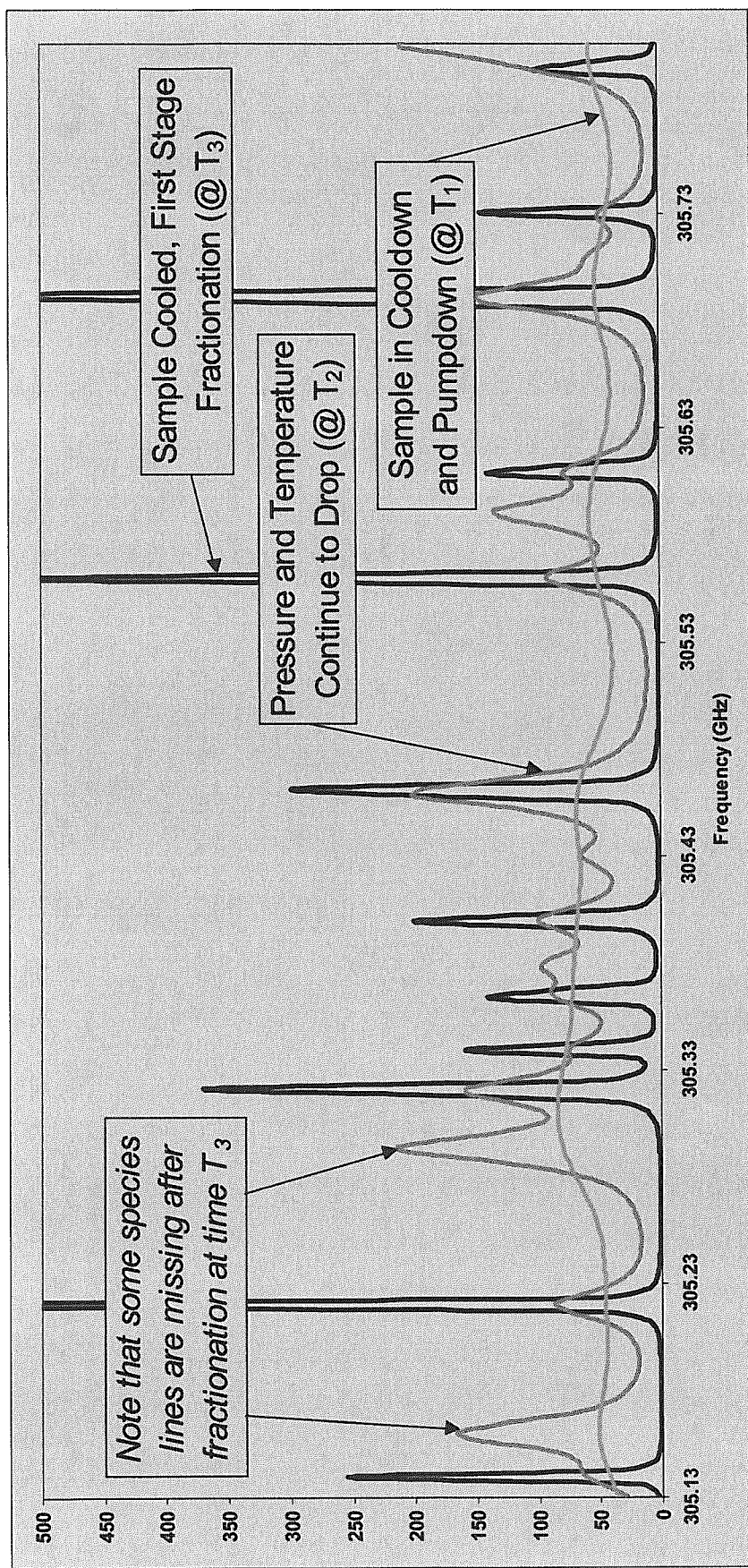


Figure 8

How the MACS System Works

Start the process with ingestion of sample (green segment) and enter the fractionation loop (blue) for N-processing stages; then wrap up the sample process by entering the red segment.

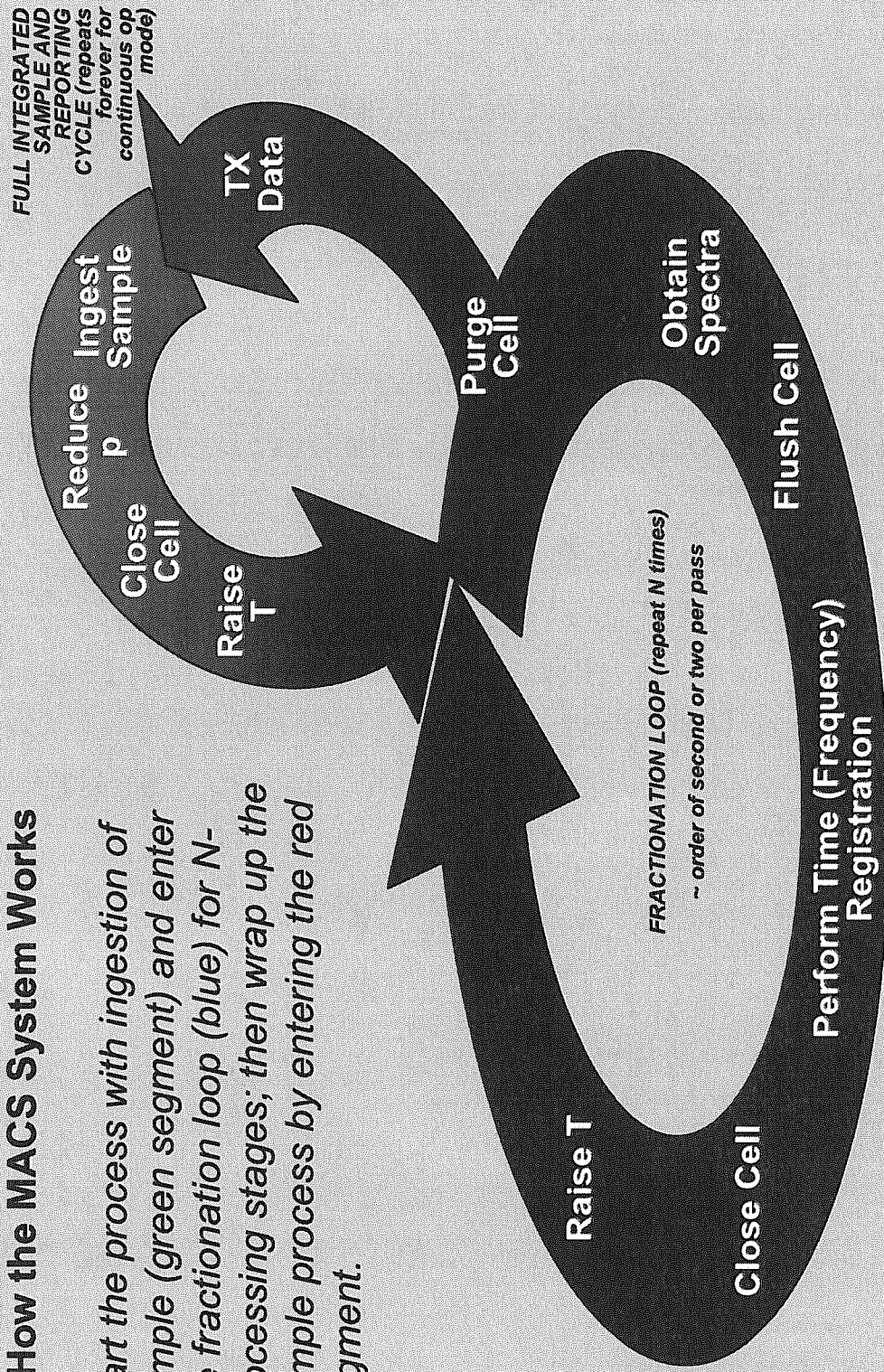


Figure 9

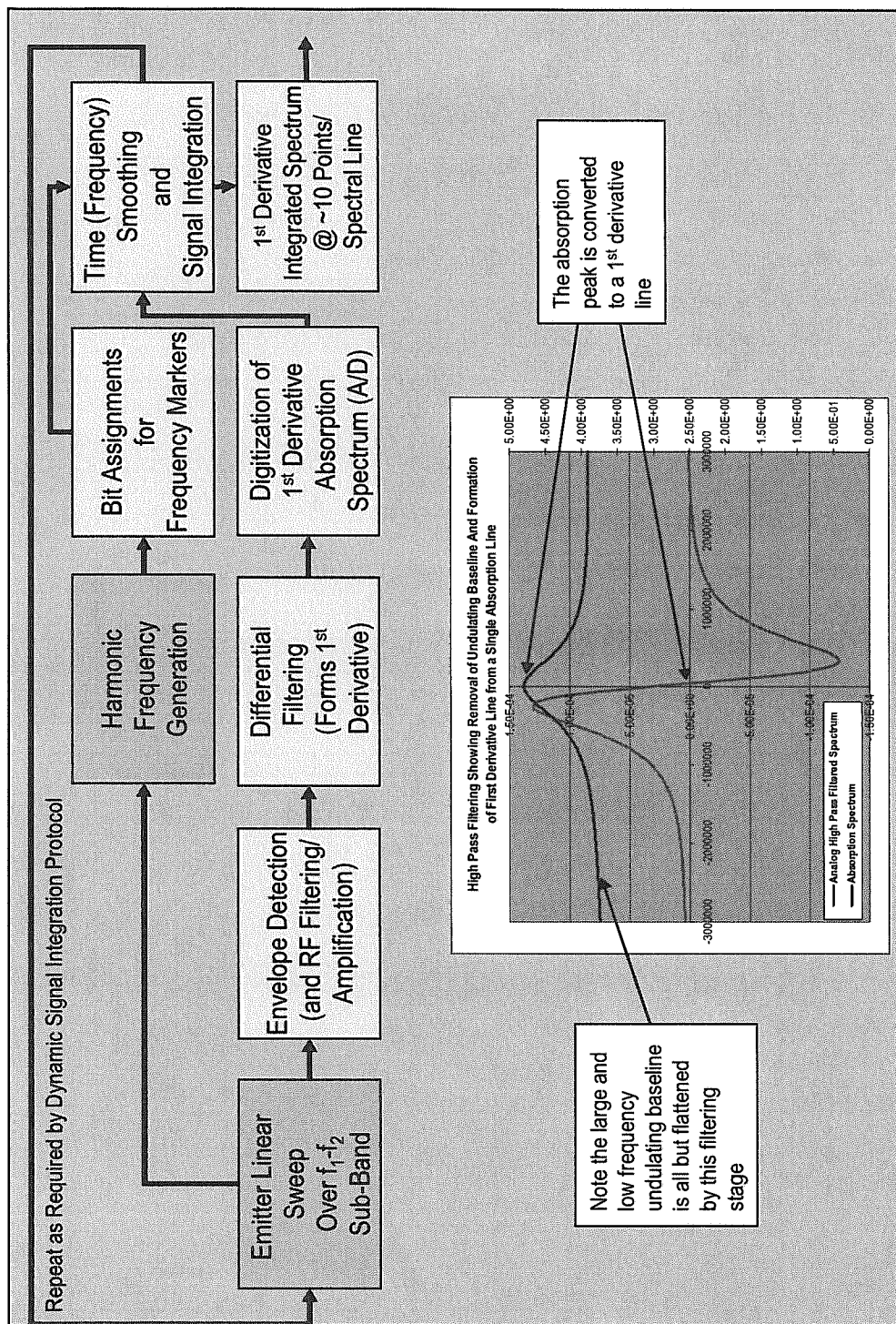


Figure 10 A

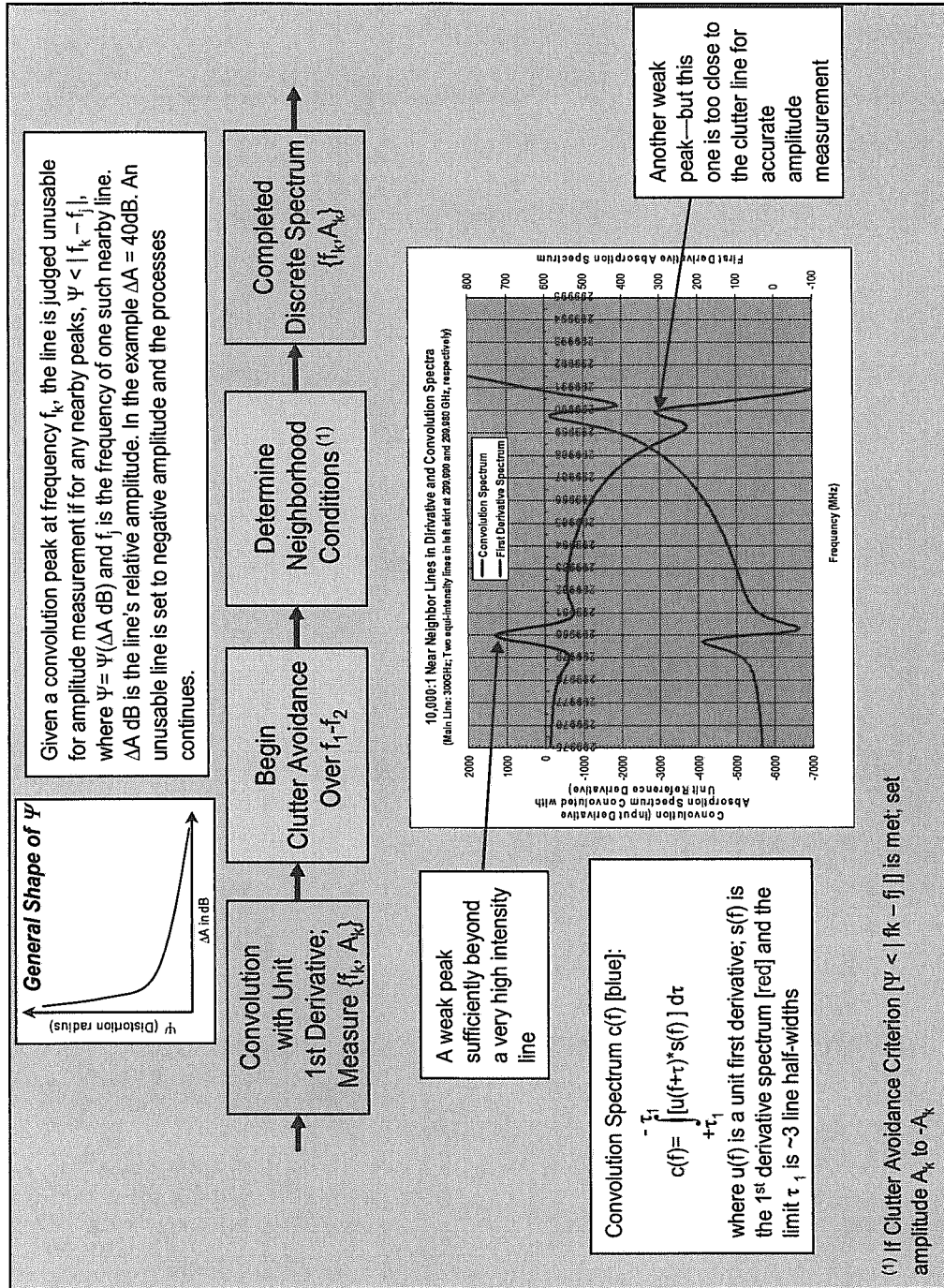


Figure 10 B

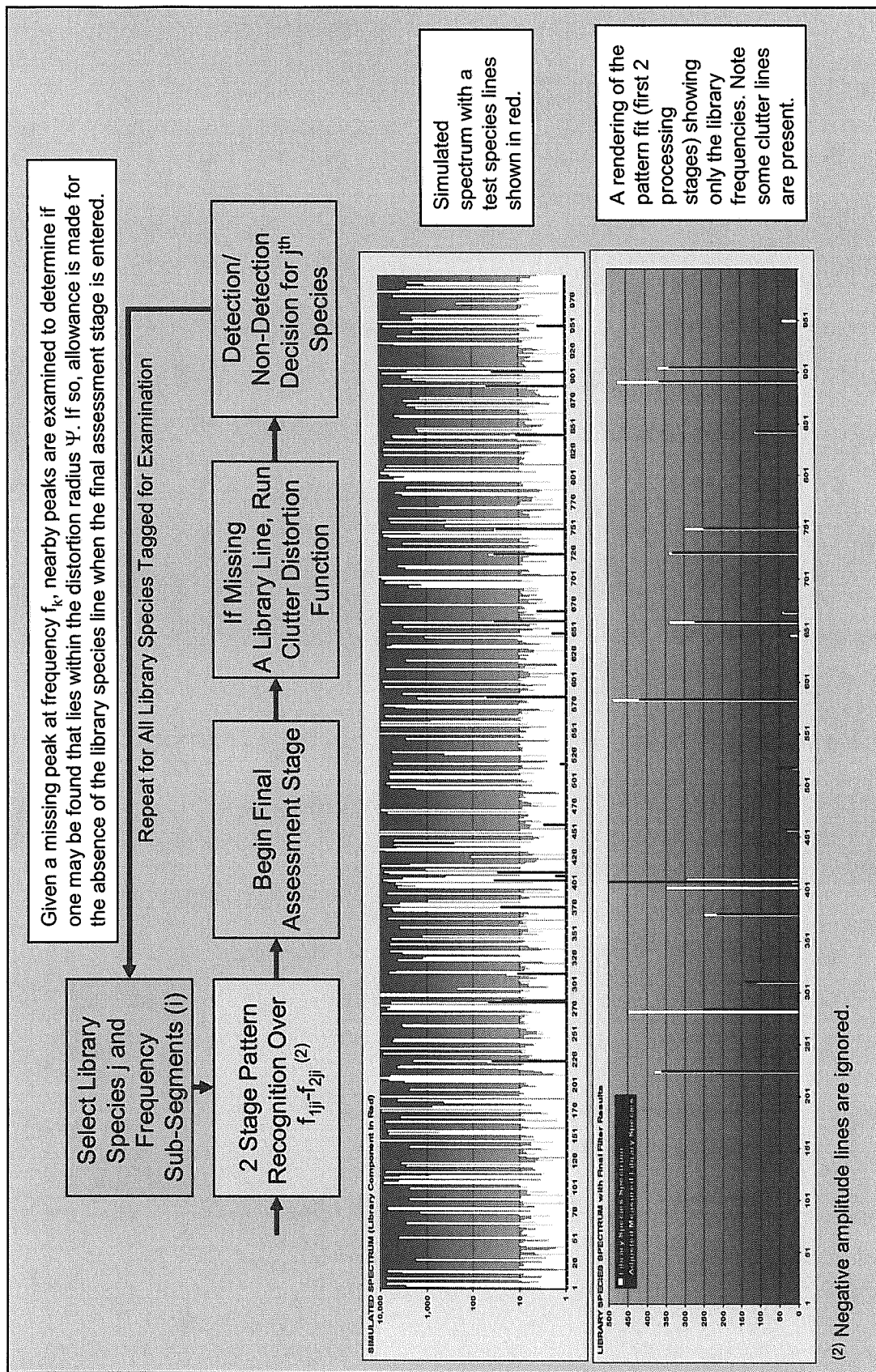


Figure 10 C

MACS Spectral Analysis ROC Examples

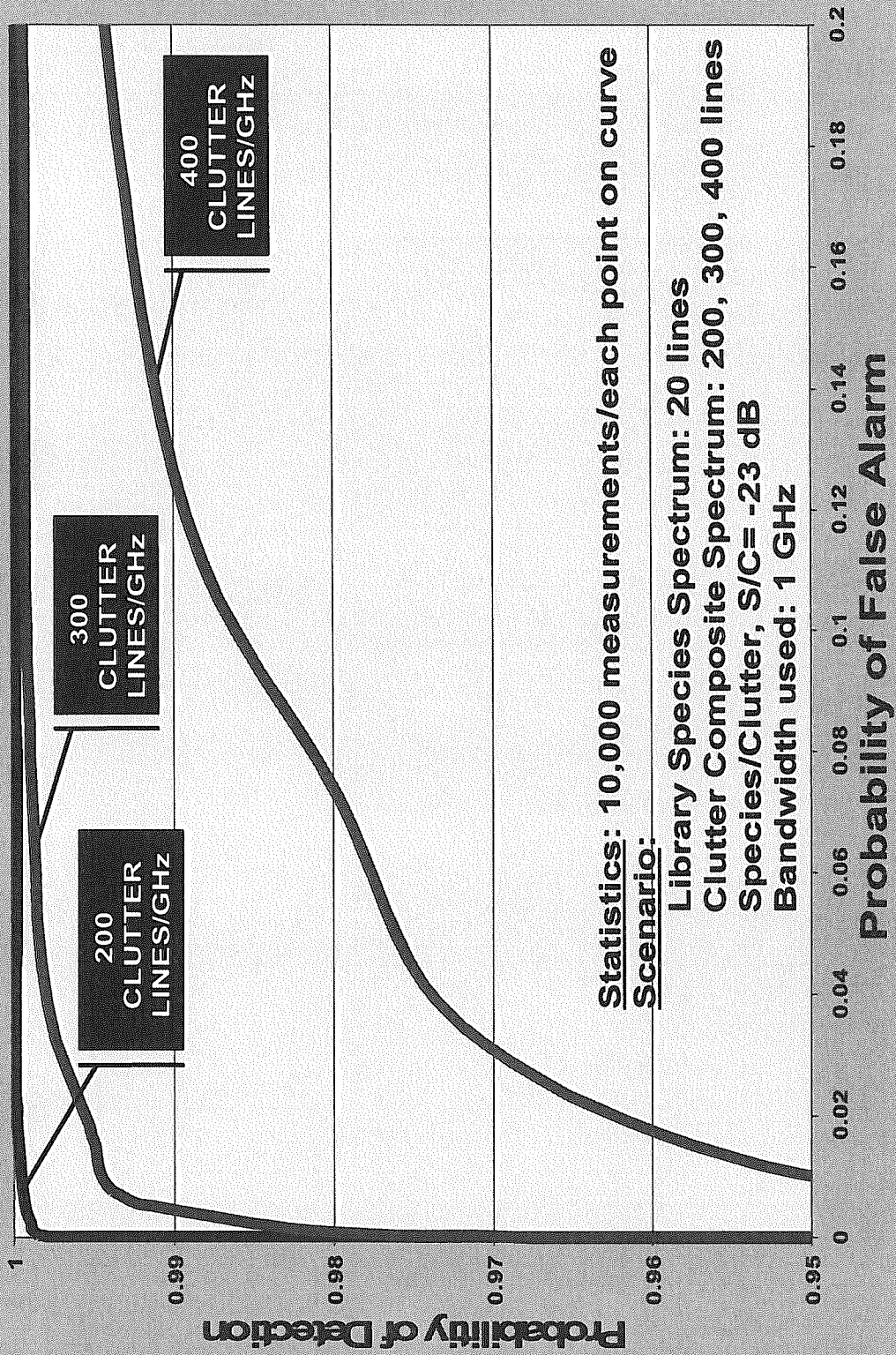


Figure 11